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Preliminary report on  
Batchawana Bay townsite,  
District of Algoma







**BATCHAWANA BAY  
TOWNSITE  
PRELIMINARY REPORT  
JULY, 1965**





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E.O. 65133 & 65537

PRELIMINARY REPORT  
ON  
BATCHAWANA BAY TOWNSITE  
DISTRICT OF ALGOMA

Prepared for  
The Administrative Sub-Committee on  
Townsites for the Province of Ontario

by

Proctor, Redfern, Bousfield & Bacon,  
Consulting Engineers & Town Planners,  
75 Eglinton Avenue East,  
Toronto 12, Ontario.

July, 1965.



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July, 1966

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## CONSULTING ENGINEERS & TOWN PLANNERS

75 EGLINTON AVENUE EAST

**TORONTO 12, CANADA**

TELEPHONE 487-1171

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G. E. M. PROCTOR, B. Eng., P. Eng.

D. B. REDFERN, B. A. Sc., P. Eng.

R. G. TREDGETT, B. A. Sc., P. Eng.

J. R. BOUSFIELD, B. A., M. Sc., M.T.P.I.C.

M. J. BACON, B. Arch., M.C.D., M.T.P.I.C.

Mr. D.F. Taylor,  
Chairman,  
Administrative Sub-Committee on Townsites,  
Department of Municipal Affairs,  
801 Bay Street,  
TORONTO, Ontario.

July 30, 1965.

Dear Mr. Taylor:

Re: E.O. 65153 and E.O. 65537  
Batchawana Bay Townsite  
District of Algoma

Further to our instructions from the Hon. J. W. Spooner, Minister of Municipal Affairs, dated June 8, 1965, and in accordance with the terms of reference contained in your letter of June 10th, we submit herewith a preliminary report on the site for a new town in the Batchawana Bay Area of the District of Algoma.


Our investigations thus far have been sufficient to narrow the choice of sites down to three areas. Although the soil characteristics of one appear to be markedly superior, we suggest that certain further investigations should be carried out before a decision is reached.

We await your instructions in this respect. If it would be helpful, we would be pleased to discuss this report at a convenient date, and show photographs of the areas examined.

Yours very truly,

PROCTOR, REDFERN,  
BOUSFIELD & BACON.

D.B.Redfern, P. Eng.



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ACKNOWLEDGEMENTS.

Thus far, we have been generously assisted by a number of persons, most notably Mr. J.S.Ball, District Forester, Sault Ste. Marie and Mr. G. Bayly, Assistant Deputy Minister, Department of Lands and Forests; Dr. E.S.Rogers, Department of Ethnology, University of Toronto; and Mr. D.F.Taylor, Director, and Mr. W.F.H.McAdams, Special Studies Section, Community Planning Branch, Department of Municipal Affairs.

To those, and others who have furnished information and material we express our thanks.





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PRELIMINARY REPORT ON  
BATCHAWANA BAY TOWNSITE.

1. THE PROBLEM.

North Canadian Enterprises Ltd. (Vauze-Coppercorp) has constructed a 500 ton per day mill in the Quebec and Lake Superior Mining Reserve at a site near Sand (Hibbard) Bay on Lake Superior some 60 miles north of Sault Ste. Marie. Employment is currently 75 men, and is expected to increase to 125-150 for the mining and milling operations at the site.

Tribag Mining Co. proposes a 2,000 ton per day mill at a site in Township No. 28, Algoma District, also about 60 miles north of the Soo. 47 men are presently employed, and ultimate employment is estimated to be in the order of 200-250.

The locations of these mines are shown on Plate No. 1. Both lie within a band of mineralized rock extending northeasterly from Sand Bay, and although no other proposals are known at this time, it is possible that this rock zone may yield opportunities for further commercial ventures in the future.







# KEY PLAN

BATCHAWANA  
AREA

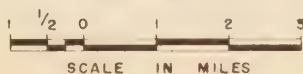
PLATE NO 1

## BATCHAWANA BAY TOWNSITE LOCATIONAL PLAN

PROCTOR, REIDERN, BOUNFIELD & BACON  
ENGINEERS & TOWN PLANNERS

T. C.

29/7/65 E-65537-1







In order to attract and retain qualified personnel for these operations, it is necessary to provide suitable accommodation for the miners and their families; in short, to create a community equipped with the physical and social elements for contemporary urban living.

In communities free of the dormitory influences of nearby metropolitan areas, it may be expected that the ratio of total population to primary jobs will be in the range 4 - 4.5/1. This ratio tends to increase with the size of the community, among other factors. Although minimal for the purpose if treated individually, the combined populations attendant upon the two mines should total about 1500-2000 persons, wholly adequate for the development of a viable community.

The two mines are about 35 miles apart by road. Thus, if a reasonably equidistant location can be found, a single townsite to serve both is at once a desirable and possible objective.

The problem, then, was to examine the area between the mines for potential townsites, beginning in the most central section. Initially, the purpose of this preliminary report was to provide sufficient information to enable the Government to make a selection. The next steps were



expected to be the acquisition of the land, and the preparation of a plan and program for the development and administration of the townsite.

However, as will be shown in the following pages, the information gathered to date is not sufficient to permit a decision between the three most attractive areas. Accordingly, the intention of this report is to set out the facts which narrow the choice down to three, describe the advantages and disadvantages of each, and to recommend the further investigations which should be completed before the final selection is made.

## 2. FACTORS AFFECTING SITE SELECTION.

### a. Area Requirements.

The terms of reference suggest one site centrally located and adequate in size to serve both mines, preferably having additional space close by for possible further expansion. Assuming a gross population density of about 10 persons per acre (involving essentially ownership units), the population attendant upon the two mines will require about 200 acres. To provide for expansion, 300 or more acres would be desirable.

30/7/65.





During preliminary discussions, it was also suggested that a location near Highway 17 would be desirable, in order that the economic base of the town might be broadened by participation in the tourist trade, services to adjacent cottage areas, etc.

b. Physical Factors.

First and foremost, the site must have soil of adequate depth, suitable drainage, and satisfactory composition for building and the installation of utilities. Topographically, grades in the range 1 to 6% are desirable. Of considerable importance will be the possibilities for attractive town design. This means some undulation, and a site overlooking and close to water. Generally speaking, the hardwoods and highest types of softwoods will be located in the soil areas which are best for town development.

There are no detailed meteorological data available which could be used to distinguish between sites in the limited Study Area. The nearest stations where weather is recorded are at Montreal River and Sault Ste. Marie Airport. Judging from these, temperatures in the Study Area may be expected to range between 5°F in January and 63°F in July.





Total precipitation will be approximately 40 inches per annum. The only climatic criterion which could be used is the general observation that sites exposed to the full sweep of the elements across Lake Superior are likely to be less pleasant than protected locations.

c. Servicing Requirements.

Aside from the Fisher & Herrick public and separate school sections, which will be mentioned later, there is no local governmental organization in the area, nor any local public services.

To serve the anticipated population, potable water supply in the order of .5 M.G.D. will be required, and spare capacity should be available for expansion. In the event that adequate ground water sources cannot be obtained, a surface supply should be within an economic distance.

Although septic tanks might be considered in the earliest phases of development, it is recommended that a proper system of sewers and a sewage treatment plant be provided to serve the anticipated population. The plant, which would have a capacity in the order of .25 M.G.D. should be located within a reasonable distance from an adequate receiving body of water.

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None of the following will influence site selection, but it is noted that electric power is already available in the area from the Great Lakes Power Co. Ltd., and telephone service (Bell Telephone Co. of Canada) is also readily available. The nearest natural gas line is at Sudbury, but indications are that a line will be brought to the Soo in 3-5 years.

d. The Existing Settlement at Batchawana Bay.

The Batchawana Bay settlement is scattered along two miles of the bay shore of the Herrick Peninsula on both sides of Highway 563. According to a survey conducted in 1963 by the Ontario Department of Health (1), the population, (exclusive of summer cottagers) is about 325, two thirds of whom are non-reserve Indians (Ojibways), or consider themselves to be Indians.

The presence of the settlement is a factor because of the generally unsatisfactory conditions which pertain among the Indian population. The survey indicates only about 6 businesses, all operated by whites. Of the 44 claiming any sort of employment, only 15 had

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(1) D.J.Porter, Provincial Sanitary Inspector. October 1963.





permanent jobs. The remainder of the employables apparently live on welfare or other governmental assistance.

Sanitary conditions are not good, owing to poorly constructed shallow wells, the consequent periodic use of polluted lake water, deplorable privies, and lack of suitable garbage disposal. The number of underfed dogs is mentioned as a potential rabies problem. There are no resident medical practitioners. Although usually weatherproof, Indian dwellings are overcrowded, fire hazards are the rule, and there is no local fire protection. The housing and the dozens of wrecked cars lying about effectively obscure a really quite striking natural setting.

The one room separate school (RCSS #1 Fisher & Herrick) is overcrowded with 60-70 pupils, but the 2 room public school (SS #1), with about 55 pupils, has adequate space. The nearest secondary schools are in Sault Ste. Marie. To darken the picture even more, the Scott Misener Steamship Company appears to own the land occupied by a number of Indian families, and this matter is now before the courts.





The introduction of economic opportunities into the area, and the establishment of a townsite in the vicinity offers distinct possibilities for improving these circumstances by way of a Community Development Program along the lines of the project currently being initiated at Moosonee. At least superficially, the prospects of a successful program at Batchawana Bay appear to be good. Mining personnel are in short supply, the Indians are not too numerous to begin with, and they have already been exposed to white urban society. Provided they are adaptable to the work, it might be possible to promote aculturation based on training in mining. A successful program here might later attract Indians from other districts, and prepare them to take jobs throughout the northern mining areas.

The question for this study is whether the townsite would be better located for this purpose quite close to the existing settlement, or at some distance removed. The problem is a complex one, and there is no fund of experience elsewhere which points conclusively to an answer. This much seems clear. If within any reasonable distance, at least the educational facilities, fire protection, health services, canine control and garbage collection of the town can be made available on some contractual basis for the benefit of the settlement.

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If located hard by however, the Town's water supply and sewerage system can be extended to eliminate the present health hazards. The prospects for adult education would seem to be better, and some of the existing Indian dwellings might be more easily used in a self-help housing program. These may be judged to be meaningful advantages.

On the other hand, attempts to accelerate integration between races frequently foster resentment, and it must be expected that proximity will increase that risk. It is therefore felt that selection of a site quite close to the Indian settlement will, in effect, commit the government to a very comprehensive and continuing Community Development Program at Batchawana Bay if a contented atmosphere is to prevail.

### 3. COMPARISON OF POTENTIAL SITES.

By a preliminary reconnaissance, it was possible to narrow the choice of sites down to three areas, 'B', 'C', and 'E' shown on Plate No. 1. The other locations inspected could be rejected because of unsuitable soil ('A'), poor local drainage ('D'), insufficient area ('F'), or shallow depth to bedrock ('G' and 'H'). The three promising





areas were afforded further study, and their respective merits are set out below. In this we were assisted by E.M.Peto and Associates Ltd., Soil Investigators. A copy of their preliminary report is made available along with this submission.

Area 'B'. The Terrace Site. Plate No. 2.

This site has an area of approximately 1500 acres. It is about 22 miles by road from the North Canadian Mine, and 13 miles from the Tribag Mine.

Advantages.

- From a soils viewpoint, this is the most suitable location, being composed predominately of sands and gravels in good depth. Drainage is good and granular materials for construction purposes are abundant.
- The site is large with ample acreage for expansion.
- The property is all in one ownership.
- The low area adjacent may permit sewage treatment by a relatively inexpensive lagoon.



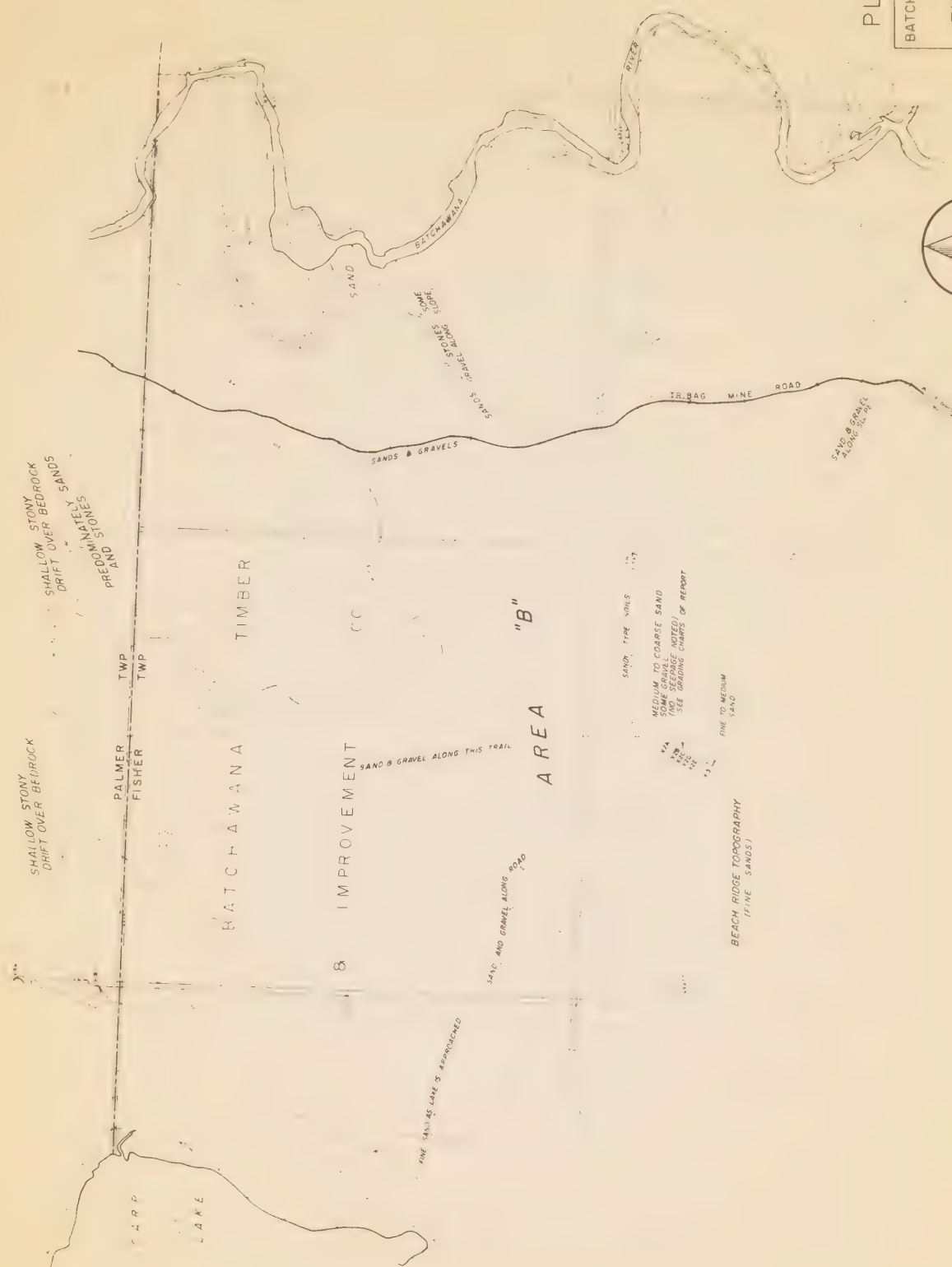


PLATE No 2

BATCHAWANA BAY TOWNSITE AREA "B"	
THE TERRACE SITE	
PROCTOR, REDFERN, BOUSFIELD & BACON CONSULTING ENGINEERS & TOWN PLANNERS 75 EDITION AVENUE EAST TORONTO, ONT. M5C 1A1	
DATE	1964
PROJECT	A-65537-1

MAP SHOWS  
MILE M PTD ASSIGNED TO





Disadvantages.

- Prospects for adequate ground water supplies are considered to be not good. The Batchawana River is nearly a mile away and the water would require treatment. Lake Superior is over a mile away, and a longish intake to deep water would be required in front of the Batchawana Bay Provincial Park.
- The site is about a mile removed from Highway 17.
- From the viewpoint of town design, this site is the least exciting. Topographically, it is rather flattish and Carp Lake is not particularly attractive. The 70 foot bluff along its southern edge affords a striking view of the Bay, but the prospect is somewhat diminished by the unattractive swampy area (Area 'A') in the foreground. The Batchawana River should provide some compensating possibilities.
- It is about 6 miles from the existing settlement, obviously too far for sewers, but not for education and other services.



Area 'C'. The North Peninsula Site. Plate No. 3.

This site has an area of some 480 acres. It is about 18 miles from the North Canadian Mine, and 17 miles from the Tribag Mine.

Advantages.

- The site is right on Highway 17, and is the most centrally located.
- Topographically, it offers perhaps the best opportunities for town design, being a gently sloping site overlooking the Bay and the sweep of the Provincial Park beach.
- It is close to the existing settlement.
- Prospects for ground water are good, and the lake is close by as an alternative source.

Disadvantages.

- The western portion of the site contains wet silts and varved clays which could cause serious construction problems.
- The property is in a multiplicity of small ownerships which will complicate land assembly, and probably increase costs of acquisition.





Disadvantages (cont'd)

- The sewage treatment plant will have to be located on the shore near existing cottage development.

Area 'E'. The South Peninsula Site. Plate No. 3.

This site has an area of about 400 acres. It is 20 miles from North Canadian Mine and 19 miles from the Tribag Mine.

Advantages.

- A portion of the area is Crown-owned, and the remainder held by only a few owners.
- Although the grades are more demanding, the potential for interesting town design is good. The site commands a view of the Bay to the east and the Lake to the west.
- If ground water is not available, the Lake to the west offers the best alternative source.
- It is close to the existing settlement.



Disadvantages.

- Bouldery soils, pockets of poor drainage, and steeper grades will increase development problems and costs.
- The site is two miles in from Highway 17 and the furthest from both mines.
- Of the three, this site is the most exposed to Lake Superior.
- Until the existing settlement is improved somewhat, the access via Highway 563 will be most uninviting.

4. RECOMMENDATIONS.

In its physical suitability for development, Area 'B' is clearly superior to the other alternatives. Having in mind that the construction of a townsite to meet a specific need is the paramount objective, it may be decided that this factor is decisive. Notwithstanding the disadvantages noted, we would be prepared to recommend Area 'B' were it not for the uncertainty of water supply. Accordingly, we suggest the following course of action:





- a. Exploration for and testing of ground water supplies should be undertaken in Area 'B' as soon as practicable. If an adequate source is discovered, it is recommended that Area 'B' be selected.
- b. If not, it is suggested that a more intensive soils investigation be carried out in Areas 'C' and 'E' to prove more conclusively their suitability or otherwise, followed by a ground water investigation program if desirable.
- c. This firm should then prepare comparative cost estimates for the development of the three areas, including the provision of water supply.



We understand that steps have already been initiated by Mr. D.F.Taylor through the Department of Public Works to obtain options in Areas 'B' and 'E' which will permit entry onto the lands for purposes of testing. Similar steps may be required in Area 'C', and with this in mind, we have requested Mr. J.S.Ball to furnish details of property ownerships in this area if possible.

The initial testing program can be carried out in a reasonable time following receipt of permission for entry, and is expected to cost in the order of \$10,000 for water investigation. A similar amount will be required for soil tests in Areas 'C' and 'E' if this becomes necessary.

Your authorization to proceed with these investigations is requested.

Respectfully submitted.

---

D.B.Redfern, P.Eng.

---

J.R.Bousfield, M.T.P.I.C.

30/7/65.





DATE	9/8/95
ISSUED BY	[Signature]
CHECKED BY	[Signature]
ADDENDA	







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Proctor, Redfern, Bousfield  
& Bacon Consulting Engineers  
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Batchawana Bay townsite,  
District of Algoma

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